

Chapter Six FINANCIAL PROGRAMS

Chapter Six

FINANCIAL PROGRAM

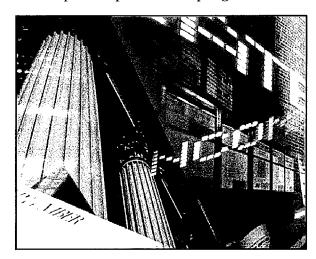




The successful implementation of the Buckeye Municipal Airport Master Plan will require sound judgement on the part of Town management. Among the more important factors influencing decisions to carry out a recommendation are timing and airport activity. Both of these factors should be used as references in plan implementation. Experience has indicated that major problems have materialized from the standard format of past planning documents. These problems center around a plan's inflexibility and inherent inability to deal with new issues that develop from unforeseen changes that may occur after it is completed. The format used in the development of this master plan has attempted to deal with this issue.

While it is necessary for scheduling and budgeting purposes to consider the timing of airport development, the actual need for facilities is established by airport activity. Proper master planning implementation suggests the use of airport activity levels rather than time as guidance for development. Tracking airport activity levels and then comparing these to forecast activity levels and facility requirements provides decision-makers with the ability to anticipate and plan for improvements when actual facilities are needed.

The presentation of the airport improvement program has been organized into three sections. First, the airport development schedule is presented in narrative and graphic form. Secondly, airport improvement funding sources on the federal, state, and local levels are identified and discussed. Finally, a continuous planning program is presented which will aid the Town of Buckeye in successfully implementing the airport improvement program.



AIRPORT DEVELOPMENT SCHEDULE AND COST SUMMARIES

Once the specific needs and improvements for the airport have been established, the next step is to determine a realistic schedule and costs for implementing the plan. The airport development schedule presented in this chapter outlines the costs for each recommended project and estimates when development should take place. Since forecast demand and operational changes can change, frequently on short

notice, the airport development schedule has been divided into planning horizons. Planning horizons are intended to reflect the fact that many future improvements for the airport are demand-based, rather than time-based, and that the actual need to improve facilities will be linked to specific and verifiable activity. The recommended improvements are grouped and divided into three planning horizons of short term, intermediate term, and long range. **Table 6A** summarizes the key activity milestones for each planning horizon.

| TABLE 6A |
|-------------------------------------|
| Aviation Activity Planning Horizons |
| Buckeye Municipal Airport |

| | 1995 | Short Term | Intermediate Term | Long Range |
|---|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| Annual Operations Itinerant Local Total Operations | 25,400 <u>59,200</u> 84,600 | 20,000 <u>76,000</u> 96,000 | 30,000 <u>80,000</u> 110,000 | 56,000 <u>84,000</u> 140,000 |
| Based Aircraft | 38 | 60 | 80 | 130 |

The program outlined on the following pages has been evaluated from a variety of perspectives and represents the culmination of a comparative analysis of basic budget factors, demand, and priority assignments. Anticipated airport improvements required to meet forecast demand over the long range planning horizon of this master plan document are included in the airport development schedule. The airport development schedule should be viewed as a fluid document which can be modified to reflect actual growth in airport activity.

The short-term (0-5 years) planning horizon covers items of highest priority as well as items that should be developed as the airport approaches short-term projected demand. When short-term projected demand levels are reached, it will be time to program for intermediate term demand levels. This procedure remains the same for the balance of the planning period. The short term planning horizon is the only stage of the airport development schedule which refers to development in specific years as demand can be more easily defined during this period and

many scheduled improvements are items important to the safe operation and maintenance of the airport. The final segment of this chapter (refer to the Continuous Planning segment) will provide various worksheets to aid Town management in making decisions relative to the implementation of these improvements.

In addition to the listing of actual improvement projects, an estimate has been made of the federal and state funding assistance available for each airport improvement project as well as the local share costs for completing the recommended improvements. Due to the conceptual nature of a master plan, implementation of capital improvement projects should occur only after further refinement of their design and costs architectural and/or through engineering analyses. The estimates reflect an allowance for engineering and other contingencies (30 percent) that may be anticipated on the project. Capital costs in this chapter should be viewed only as estimates subject to further refinement during design. Nevertheless, these estimates are considered sufficiently accurate for performing the feasibility analyses in this chapter.

SHORT TERM PLANNING HORIZON IMPROVEMENTS

The short term planning horizon roughly equates with the first five years of the planning period (1997-2001). Development within the short term planning horizon is concentrated on the most immediate needs of the airport.

This includes pavement maintenance and rehabilitation, safety and security improvements, and developing hangar areas for airport revenue enhancement and to increase the number of based aircraft. As illustrated in Table 6B, short term planning horizon improvements are estimated at \$3.0 million. Pavement maintenance (slurry seal) of the runway/taxiway system and apron pavement areas is included in the short term planning horizon. All pavement rehabilitation projects are eligible for State funding assistance.

Runway improvements in the short term include widening the runway from 75 feet to 100 feet as well as the first stage of the runway/parallel taxiway extension which is included in the final vear of the short term program. The widening and 1,200 foot extension will allow the runway to provide the length required by a majority of corporate aircraft. At this time, the parallel taxiway is extended, an additional exit taxiway is provided, and runway/ taxiway lighting and marking is extended/installed. The runway and taxiway extension project constitutes more than half of total short term development costs.

Remaining projects within the short term planning horizon include rehabilitation of the rotating beacon, expansion of the aircraft parking apron to the north (Phase I), and construction of an access road and parking lot for terminal expansion to the north (Phase I). As noted in previous chapter, Thangars should be concentrated to the south of the existing T-hangar facilities. In order to provide separation of activity

| TABLE 6B Capital Improvement Program (CIP) Buckeye Municipal Airport | | | | |
|--|-----------------------------------|--|-------------------------------|------------------------------|
| | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
| CY 1998 | | | | |
| Rehabilitate Rotating Beacon Expand Parking Apron - Phase I | \$10,000 725,000 | \$0 660,185 | \$9,000 32,407 | \$1,000 32,408 |
| Subtotal | \$735,000 | \$660,185 | \$41,407 | \$33,408 |
| CY 1999 | | | | |
| Construct Auto Parking Lot - Phase I Construct Road to North-Phase I | \$92,000 46,000 | \$0 41,888 | \$0 2,056 | \$92,000 2,056 |
| Subtotal | \$138,000 | \$41,888 | \$2,056 | \$94,056 |
| CY 2000 | | | | |
| 5. Widen Runway to 100 feet6. Slurry Seal Runway and Taxiways7. Pavement Maintenance - Apron | \$1,200,000 375,000 107,000 | \$1,092,720 0 0 | \$53,640 337,500 96,300 | \$53,640 37,500 10,700 |
| Subtotal | \$1,682,000 | \$1,092,720 | \$487,440 | \$101,840 |
| CY 2001 | | | | |
| 8. Extend Runway 1,200 feet North 9. Extend Parallel Taxiway 1,200 Feet | \$1,100,000 518,500 | \$1,001,660 472,146 | \$49,170 23,177 | \$49,170 23,177 |
| Subtotal | \$1,618,500 | \$1,473,806 | \$72,347 | \$72,347 |
| CY 2002 | | 7 (1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 1980 - 19 | | |
| Property Acquisition to the North of Yuma Road Property Acquisition for RSA, RPZ, and | \$2,415,000 | \$2,199,099 | \$107,950 | \$107,951 |
| MALSR to South | 585,000 | 532,701 | 26,149 | 26,150 |
| Subtotal | \$3,000,000 | \$2,731,800 | \$134,099 | \$134,101 |
| SHORT TERM TOTAL | \$7,173,500 | \$6,000,399 | \$737,349 | \$435,752 |

| TABLE 6B (Continued) Capital Improvement Program (CIP) Buckeye Municipal Airport | | | | |
|--|---------------|--|------------------|--|
| | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
| INTERMEDIATE TERM IMPROVEME | ENTS | | | 100000 |
| 1. Pavement Maintenance Program | \$300,000 | \$0 | \$270,000 | \$30,000 |
| 2. Site Preparation and Paving for | | | 1 ! | |
| Construction of 20 T-hangars | 200,000 | 182,120 | 8,940 | 8,940 |
| 3. Extend Terminal Taxiway to North | 397,000 | 361,508 | 17,746 | 17,746 |
| 4. Extend Terminal Taxiway to South | 630,000 | 573,678 | 28,161 | 28,161 |
| 5. Improvement of Butler Street | 45,000 | 0 1 | 0 | 45,000 |
| 6. Install REIL - Runway 17 | 35,000 | 35,000 | 0 | (|
| 7. Install MALSR - Runway 35 | 350,000 | 350,000 | 0 | (|
| 8. Install VGSI-4 - Runway 17-35 | 70,000 | 70,000 | 0 | (|
| 9. Construct Roadways for Parcel | 1 | | 1 ' | İ |
| Development | 1,040,000 | 0 | 0 | 1,040,000 |
| 10. Improve Airport Infrastructure | 350,000 | 318,710 | 15,645 | 15,64 |
| 11. Construct Taxiway Northeast Parcel | 1 1 | <u> </u> | · | |
| Development | 653,000 | 594,622 | 29,189 | 29,18 |
| 12. Construct Taxiway for Southeast | 1 | | | |
| Parcel Development | 715,000 | 651,079 | 31,960 | 31,96 |
| INTERMEDIATE TERM TOTAL | \$4,785,000 | \$3,136,717 | \$401,641 | \$1,246,642 |
| LONG RANGE IMPROVEMENTS | | | | ************************************** |
| Expand Parking Apron North - | <u> </u> | Galactic grant and process of the control of the co | | |
| Phase II | \$950,000 | \$865,070 | \$42,465 | \$42,468 |
| 2. Construct Road for North | ক্ষত্ত,ততত | φουσ,στο | Φ±4,±00 | φ42,+0 |
| 2. Construct Road for North Terminal Area - Phase II | 175 000 | 159,355 | 7,822 | 7 99 |
| 3. Construct North Terminal Area | 175,000 | 199,999 | 1,044 | 7,82 |
| | 117 000 | 0 | 0 | 11700 |
| Parking Lot - Phase II | 117,000 | · · | " | 117,00 |
| 4. Site Preparation and Paving for | 900,000 | 100 100 | 9,040 | 004 |
| Construction of 20 T-hangars | 200,000 | 182,120 | 8,940 | 8,94 |
| 5. Relocate Yuma Road | 520,000 | 473,512 | 23,244 | 23,24 |
| 6. Extend Runway and Parallel | - 274 200 | - 550 010 | 077.044 | 07.04 |
| Taxiway 1,800 Feet North | 1,954,000 | 1,779,312 | 87,344 | 87,34 |
| 7. Construct Parallel Runway and | . === === | : = = = = = = = = = = = = = = = = = = = | | |
| Taxiway | 4,510,000 | 4,106,806 | 201,597 | 201,59 |
| 8. Install VGSI-2 on Parallel | | == === ! | | |
| Runway | 70,000 | 70,000 | 0 | |
| LONG RANGE TOTAL | \$8,496,000 | \$7,636,175 | \$371,412 | \$488,41 |
| TOTAL PROGRAM COST | \$20,454,500 | \$16,773,291 | \$1,510,402 | \$2,170,80 |

levels, terminal area expansion (i.e. aircraft parking apron and FBO hangars) should be to the north of the

existing apron. As indicated by the table, most of these projects will be

eligible for both State and Federal funding assistance.

INTERMEDIATE PLANNING HORIZON IMPROVEMENTS

Improvements included in the intermediate planning horizon are intended to improve the service level of the airfield, protect the long range viability of the airport, and improve airport ground access. Total intermediate planning horizon improvements are estimated at \$4.8 million. All proposed improvements and their associated costs are also depicted in **Table 6B** (Continued).

Improvement of the terminal area taxiway system is included with the extension of the terminal area access taxiway north to Taxiway Echo (with an additional access/connecting taxiway leading to Taxiway Delta) and south (Phase I) to Taxiway Alpha (with an additional access/connecting taxiway leading to Taxiway Bravo). Extending the terminal area taxiway will improve airfield circulation by providing for twoway circulation. It will also allow provide direct access to aircraft departing or returning the T-hangar facilities. Site preparation and taxilane paving for an additional 20 T-hangars is included as well.

Taxiway access aimed at providing airfield access to the industrial/commercial parcels requiring airfield access is included in the intermediate term schedule as well. The plan calls for the construction of a taxiway leading

from Taxiway Alpha running to the east then turning 90 degrees to serve the southeast parcels. Another taxiway from the existing end of Taxiway Echo running south to serve the northeast parcels.

As mentioned in previous chapters, the continued evolution of the global positioning system (GPS) will allow small general aviation airports, such as Buckeye Municipal Airport the ability to provide precision instrument approach capability at a fraction of the cost of traditional equipment. For this reason, Runway 35 has been planned for a precision instrument approach. This approach requires the installation of a MALSR to attain Category I (CAT I) minimums (one-half mile visibility and 200 foot cloud ceilings).

An additional airfield lighting improvement is replacing the existing two-box precision approach path indicators (PAPI-2) on both ends of Runway 17-35 with four box PAPI's (PAPI-4).

Ground access improvements include rehabilitating the main airport entrance road (Butler Street), and constructing paved access roads for the industrial/ commercial parcels.

The following property purchases are included in the intermediate planning horizon: to the south to meet FAA's requirements for the RSA, runway protection zone (RPZ), and the installation of a medium intensity approach lighting system with runway alignment lights (MALSR).

LONG RANGE PLANNING HORIZON

range planning improvements are intended to produce an airport capable of accommodating expected aviation activity the western Phoenix Metropolitan Area accommodating increased aviationrelated and industrial/commercial development at the airport. During the long range planning horizon the airport is expected to have 130 based aircraft and accommodate 130,000 annual aircraft operations. This growth can be expected to include business and corporate users, utilizing more turboprop and business jet aircraft. Total long range planning horizon improvements are estimated at \$8.5 million.

Hangar development within the long range planning horizon is intended to accommodate increased numbers of based aircraft. Site preparation and taxilane paving for 20 additional Thangars is planned.

The remaining improvements included in the long range planning horizon are intended to increase airfield capacity at the airport. Chapter Three indicated the need for additional airfield capacity to meet the demand level of the long range planning horizon. For this reason, the construction of a parallel runway/taxiway system is included in the long range development schedule.

The existing runway/parallel taxiway is planned for a 1,800 foot extension to accommodate the needs of the critical aircraft (100 percent of corporate

aircraft). Runway/taxiway lighting is extended as well. In order to accommodate the runway extension, Yuma Road must be relocated and property acquisition to the north is also required.

AIRPORT DEVELOPMENT AND FUNDING SOURCES

Financing future airport improvements will not rely exclusively upon the financial resources of the Town of Buckeye. Airport improvement funding assistance is available through various grant-in-aid programs on both the state and federal levels. The following discussion outlines the key sources for airport improvement funding and how they can contribute to the successful implementation of this master plan.

FEDERAL AID TO AIRPORTS

The United States Congress has long recognized the need to develop and maintain a system of aviation facilities across the nation for national defense and promotion of interstate commerce. Various grants-in-aid programs public airports have been established over the years for this purpose. The current federal grant-in-aid program is the Airport Improvement Program AIP has been (AIP) of 1982. reauthorized several times with the most recent reauthorization (the Federal Aviation Authorization Act of 1996) extending through federal fiscal year 1998. Funding is authorized at \$2.28 billion for fiscal year 1997 and at \$2.347 billion for fiscal year 1998.

The source for AIP funds is the Aviation Trust Fund. The Aviation Trust Fund was established in 1970 to provide funding for aviation capital investment programs (e.g., facilities and equipment, research and development, and grants for airport development and expansion projects). A majority of the FAA's operations account is financed through the Aviation Trust Fund. The Aviation Trust Fund is funded by federal user fees and taxes on airline tickets, aviation fuel, and various aircraft parts.

AIP funds are distributed each year by the FAA under authorization from the United States Congress. A portion of each year's authorized level of AIP funding is distributed to all eligible commercial service airports through an entitlement program that guarantees a minimum level of federal assistance each year based on prior year enplanements and/or cargo service levels.

The remaining AIP funds are distributed by the FAA to airports based upon the priority of the project for which they have requested Federal assistance. A National Priority Ranking System is used to evaluate and rank each airport project. Those projects with the highest priority are given preference in funding.

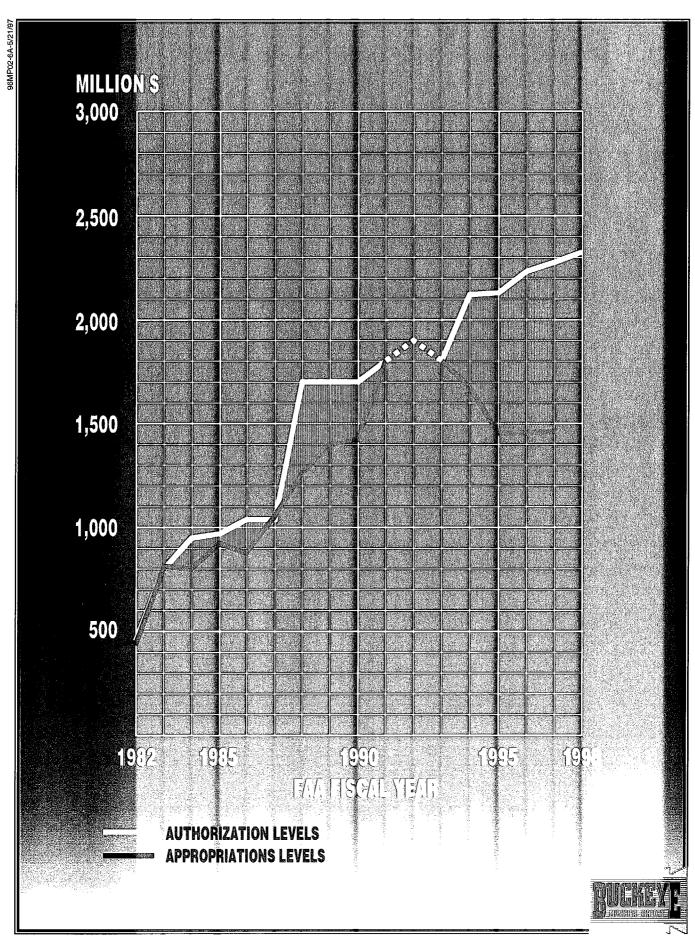
Each airport project for Buckeye Municipal Airport must follow this procedure and compete with other airport projects in the State for AIP State Apportionment dollars and across the country for other Federal AIP funds. An important point to consider is that, unlike entitlement dollars for

commercial service airports, federal funding is not guaranteed for Buckeye Municipal Airport.

Exhibit 6A depicts the history of AIP authorizations and appropriations. Unfortunately, the funding levels authorized in the legislation are not always the levels appropriated in the annual Congressional budget process. In fiscal year 1996, the AIP authorized level was \$2.161 billion, but only \$1.45 billion was appropriated. When the appropriation is too low to meet the legislated formulas, funds are prorated to the appropriated levels. In 1996, for example, entitlement programs were funded approximately 77 percent of the authorized levels.

The Federal Aviation Authorization Act of 1996 adjusted allocation formulas to increase entitlements over previous levels and to establish discretionary funding be at least \$148 million in addition to Letter of Intent (LOI) commitments. According to FAA, the fiscal year 1997 appropriation of \$1.46 billion should provide full funding of entitlements even though this is the largest discrepancy ever between appropriated and authorized AIP funding. Discretionary funding is anticipated to be approximately \$300 As of mid-May 1997, AIP funding for federal fiscal year 1998 had not been appropriated.

The Federal Aviation Authorization Act of 1996 also eliminated discretionary set-asides of 1.5 percent for small commercial service airports, and 5.0 percent for reliever airports and combines them with the general



aviation into the State General Aviation Allocation. The "States" set-aside allocation was increased from 12.5 percent to 18.5 percent. For 1997 this will total \$270.1 million compared to \$228.9 million for the three set-asides in 1996.

In Arizona, airport development projects that meetthe FAA's discretionary funds eligibility requirements, receive 91.06 percent funding from the AIP. Eligible projects include airfield, apron, terminal, and access road improvements. However, revenue generating improvements such as automobile parking, fuel facilities. utilities, and hangars are not eligible for AIP funding.

FAA FACILITIES AND EQUIPMENT PROGRAM

The Airway Facilities Division of the FAA administers the national Facilities and Equipment (F&E) Program. This annual program provides funding for the installation and maintenance of various navigational aids equipment for the national airspace system and airports. Under the F&E program, funding is provided for FAA air traffic control towers, enroute navigational aids such as the VOR, and on-airport navigational aids such as PAPI's and approach lighting systems. activity levels and other development warrant, the airport may be considered by the FAA Airways Facilities Division for the installation and maintenance of navigational aids through the F&E program. Recommended improvements in this

master plan which may be eligible for funding through the F&E program include the PAPI's for each runway end and REIL for the Runway 17 end. Should the Airway Facilities Division of the FAA install these navigational aids at the airport, they would be operated and maintained by the FAA at no expense to the airport.

STATE AID TO AIRPORTS

In support of the state airport system, the State of Arizona also participates in airport improvement projects. The source for State airport improvement funds is the Arizona Aviation Fund. Taxes levied by the State on aviation fuel, flight property, aircraft registration tax, and registration fees, as well as interest on these funds are deposited in the Arizona Aviation Fund. The Transportation Board establishes the policies for distribution of these State funds.

Under the State of Arizona grant program, an airport can receive funding for one-half (4.47 percent) of the local share of projects receiving federal AIP funding. The State also provides 90 percent funding for projects, such as pavement maintenance, which are not eligible for AIP funding. The State has set a maximum grant amount of \$965,000 for all eligible airports in fiscal year (FY) 1997.

State Airport Loan Program

The Arizona Department of Transportation - Aeronautics Division

(ADOT) recently established the Airport Loan Program. This program was established to enhance the utilization of State funds and provide a flexible funding mechanism to assist airports in funding improvement projects. Eligible projects include runway, taxiway, and apron improvements, land acquisition, planning studies, and the preparation of plans and specifications for airport construction projects, as well as revenue generating improvements such hangars and fuel storage facilities. Projects which are not currently eligible for the State Airport Loan Program are considered if the project would enhance the airport's ability to be financially self-sufficient.

There are three ways in which the loan funds can be used: Grant Advance, Funds, or Revenue Matching The Grant Generating Projects. Advance funds are provided when the airport can demonstrate the ability to accelerate the development construction of a multi-phase project. The project(s) must be compatible with the Airport Master Plan and be included in the ADOT 5-year Airport Development Program. The Matching Funds are provided to meet the local matching fund requirement for securing federal airport improvement grants or other federal or state grants. Revenue Generating funds are provided for airport-related construction projects that are not eligible for funding under another program. The availability of funds through this program is subject to the aviation revenues generated in the State.

LOCAL FUNDING

The balance of project costs, after consideration has been given to grants, must be funded through local resources. Traditionally, local funding for airports has come from the public sector which would underwrite bonds or designate general tax revenues for airport improvements. However, the private sector, as a source for airport funding, is often overlooked.

Private investment can be significant and come in several forms. For example, private investment in the construction of T-hangars and fixed based operator (FBO) facilities on property leased from the airport is a common method of providing improved airport facilities. Another method of private investment involves a private firm constructing airport facilities and then leasing them back to the airport sponsor. The development of aviation-related industrial facilities on the airport is another method of private investment in the airport.

Although not a common means of financing airport development projects, the role of private financial contributions to an airport not only increases the financial support of a project, but also stimulates moral support for airport development. It is not unusual for a community to approach local businesses and industries for contributions to help improve the airport. For example, a company with a larger, more demanding aircraft may contribute portions of

the development funds for a runway extension. Commitment on the part of the private sector reflects the importance of the airport to the local businesses and industry.

Funding for improved airport facilities, however, ultimately lies with the Town of Buckeve. Funding for airport improvements should come from airport revenues first. Should airport revenues be sufficient to fund not improvement, funding may have to come from general tax revenues. While it is ideal that airport improvements should be funded through airport revenues, the benefit of the airport to local community in terms of its role in developing and supporting economic growth should be a factor in continuing to improve airport facilities. Because of the important role that the airport clearly plays in the community as a whole, the private and public sector must work together to ensure that adequate financing is available for future airport development needs.

PROJECTED AIRPORT REVENUE AND EXPENSES

The capability of local sources to provide the local matching share on improvement projects weighs heavily in the priority of AIP funding. In essence, the local share acts a measure of the community's sense of value for the airport. The following sections examine the potential sources for local funding beginning with an examination of the airport's revenue potential and expense projections.

AIRPORT REVENUE

As described in the first chapter, the airport entered into a master lease agreement in the late 1980's with the Lauridsen Industrial Corporation. The lease allowed Lauridsen control of all airport property and development but stipulated that Lauridsen contribute all of the local share portions for all development items within the five year CIP. This portion of the lease arrangement expired in 1995. The lease agreement now requires the Lauridsen Industrial Corporation to pay one percent of gross revenues annually.

Lauridsen Corporation lease arrangement is the only revenue source that the Town of Buckeye receives from the airport. Unless the lease is changed in the future, it can be expected that airport revenues captured by the Town of Buckeye will equal one percent of the Lauridsen Corporation's gross revenues. The one percent of gross revenue received by the Town of Buckeye should applied to funding airport improvement projects. If improvements need to occur faster than projected, the Town and leaseholder must consider means for funding critical projects (i.e. jointly, an increase in percentage of gross revenue receipts, or as in the past, have the leaseholder fund the projects and apply credit to future year lease payments).

AIRPORT EXPENSES

Historically, Lauridsen Industrial Corp. has incurred all airport expenses

(including the local share of grant matches for the first five year capital improvement program), leaving the Town of Buckeye with no operational costs. Although the Lauridsen Corporation is no longer obligated to provide matching funds for airport improvement projects, the master lease arrangement stipulates that the Lauridsen Corporation incur the maintenance expenses of the airport for the full length of the lease.

It can be expected, therefore, that the only airport expenses to be incurred by the Town of Buckeye in the future will be funds needed for matching shares of airport improvement projects. The Town of Buckeye's share of projected capital expenditures for the airport were previously illustrated on **Table 6B**.

PLAN IMPLEMENTATION

The best means of beginning the implementation of recommendations of this master plan is to first recognize that planning is a continuous process that does not end with completion of the Rather, the ability to master plan. continuously monitor the existing and forecast status of airport activity must be provided and maintained. The basic issues upon which this master plan is based will remain valid for several years. In fact, they are likely to remain valid into the next century. As such, the primary goal is for the airport to evolve into a facility that will best serve the air transportation needs of the local area well into the 21st century and to

evolve into a self-supporting economic generator for the region.

Toward meeting this goal, successful implementation of airport improvement projects will require sound judgement by airport management. Among the more important factors influencing the decision by airport management to carry out a specific improvement are timing and airport activity. Both factors should be used as references in the implementation of the master plan. In this master plan, focusing on the timing of airport improvements was necessary. However, the actual need for facilities is more appropriately established by airport activity levels rather than a specified date.

For example, based aircraft projections have been made which will require the construction of T-hangar facilities. However, in reality, the time frame in which these facilities will be needed may be substantially different. Actual demand may be slow in reaching forecast activity levels. On the other hand, increased based aircraft totals may establish the need for new facilities much sooner. Although every effort has been made in this master planning process to conservatively estimate when facility development may be needed, aviation demand will dictate when facility improvements need to be accelerated or delayed.

The real value of a usable master plan is that it keeps the issues and objectives in the mind of the user so that he or she is better able to recognize change and its effect. In addition to adjustments in aviation demand, decisions made as to when to undertake recommended improvements in this master plan will impact the period that the plan remains valid. The format used in this plan is intended to reduce the need for costly updates. Updating can be done by the user, improving the plan's effectiveness.

In summary, the planning process requires the Town of Buckeye to consistently monitor the progress of the airport in terms of total aircraft operations, total based aircraft, and overall aviation activity. Analysis of aircraft demand is critical to the exact timing and need for new airport facilities. The information obtained from this continuous monitoring process will provide the data necessary to determine if the development schedule should be accelerated or decelerated.

The development schedules as presented in the tables to follow and as depicted on **Exhibit 6B** on the following

pages are designed to aid airport management in hetacontinuous evaluation of programming of airport development. The development schedules should not be viewed as a commitment to the improvements shown. Rather, it is hoped that the inclusion of these tables and exhibits will help decision makers recognize the continuous planning process and allow the airport master plan to become a valuable tool in this process.

With the information collected and recorded on the following sheets, adjustments in the development schedule can be made to effectively deal with variations in forecast or any unanticipated demand that may arise. By closely monitoring the activity and availability of funds with the work sheets provided on the following pages, management will be able to carry out its function of implementing the master plan.

SHORT TERM PLANNING HORIZON Airport Development Program

The table provided below has been designed to note the funds available for development so that they can be kept in mind while analyzing the development factors outlined for this period on the next few pages. The table also provides a reminder of other potential funding sources that might be used in critical situations.

| Airport Funds Balance | \$ |
|-----------------------|----|
| Bonds | \$ |
| Contributions / Other | \$ |
| TOTAL | \$ |

As a reminder, airport development should be keyed to demand (actual activity) rather than to a specific time frame (forecast activity). The spaces provided below allow actual activity data to be recorded for comparison with the planning horizon envelope. This

should be the first step in the process of initiating the recommended development program for this period. Significant increases or decreases in actual activity may justify acceleration or deceleration of the airport development schedule.

| Activity | Estimated 1995 | Actual | Short Term Planning Horizon Forecast Levels |
|----------------|-------------------|--------|---|
| Based Aircraft | 38 | | 80 |
| Operations | 84,600 | | 110,000 |

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs, or development potentials occurred which may impact the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for each development item includes a 30 percent factor for engineering, contingency, and administration.

SHORT TERM PLANNING HORIZON (Continued) Development Funding

| Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|--|---------------|-----------------|------------------|----------------|
| 1998 | | - | | |
| 1. Rehabilitate Rotating Beacon | \$10,000 | \$0 | \$9,000 | \$1,000 |
| 2. Expand Apron North - Phase I | 725,000 | 660,185 | 32,407 | 32,408 |
| 1999 | · | | | · |
| 3. Construct Auto Parking Lot - Phase I | 92,000 | 0 | 0 | 92,000 |
| 4. Construct Road to North Terminal Area - | | | | |
| Phase I | 46,000 | 41,888 | 2,056 | 2,056 |
| 2000 | | | | |
| 5. Widen Runway to 100 feet | 1,200,000 | 1,092,720 | 53,640 | 53,640 |
| 6. Slurry Seal Runway and Taxiways | 375,000 | 0 | 337,500 | 37,500 |
| 7. Pavement Maintenance - Apron | 107,000 | 0 | 96,300 | 10,700 |
| 2001 | | | | |
| 8. Extend Runway 1,200 feet North | 1,100,000 | 1,001,660 | 49,170 | 49,170 |
| 9. Extend Parallel Taxiway 1,200 feet | 518,500 | 472,146 | 23,177 | 23,177 |
| 2002 | | | | |
| 10. Acquisition of property North of Yuma Road | 2,415,000 | 2,199,099 | 107,950 | 107,951 |
| 11. Property Acquisition for RSA, RPZ, & MALSR | | | | |
| to South | 585,000 | 532,701 | 26,149 | 26,150 |
| Short Term Planning Horizon Subtotal | \$7,173,500 | \$6,000,399 | \$737,349 | \$435,752 |

Plus or Minus Other Proposed Development:

| Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|------------------|---------------|-----------------|------------------|----------------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| TOTAL | | | | |

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The Town should have applications submitted early for the maximum funding possible in case additional funds become available.

INTERMEDIATE PLANNING HORIZON Airport Development Program

The table provided below has been designed to note the funds available for development so that they can be kept in mind while analyzing the development factors outlined for this period on the next few pages. The table also provides a reminder of other potential funding sources that might be used in critical situations.

| Airport Funds Balance | \$ |
|-----------------------|----|
| Bonds | \$ |
| Contributions / Other | \$ |
| TOTAL | \$ |

As a reminder, airport development should be keyed to demand (actual activity) rather than to a specific time frame (forecast activity). The spaces provided below allow actual activity data to be recorded for comparison with the planning horizon envelope. This

should be the first step in the process of initiating the recommended development program for this period. Significant increases or decreases in actual activity may justify acceleration or deceleration of the airport development schedule.

| Activity | Short Term Planning Horizon Forecast Levels | Actual | Intermediate Term Planning Horizon Forecast Levels |
|----------------|---|--------|--|
| Based Aircraft | 60 | | 80 |
| Operations | 96,000 | | 110 ,000 |

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs, or development potentials occurred which may impact the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for each development item includes a 30 percent factor for engineering, contingency, and administration.

INTERMEDIATE PLANNING HORIZON (Continued) Development Funding

| | Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|-----|--|-------------|-----------------|------------------|----------------|
| 1. | Pavement Maintenance Program | \$300,000 | \$0 | \$270,000 | \$30,000 |
| 2. | Site Preparation and Paving for | , í | , | , , | ' ' |
| | Construction of 20 T-hangars | 200,000 | 182,120 | 8,940 | 8,940 |
| 3. | Extend Terminal Taxiway to North | 397,000 | 361,508 | 17,746 | 17,746 |
| 4. | Extend Terminal Taxiway to South | 630,000 | 573,678 | 28,161 | 28,161 |
| 5. | Improvement of Butler Street | 45,000 | 0 | 0 | 45,000 |
| 6. | Install REIL - Runway 17 | 35,000 | 35,000 | 0 | 0 |
| 7. | Install MALSR - Runway 35 | 350,000 | 350,000 | 0 | 0 |
| 8. | Install VGSI-4 - Runway 17-35 | 70,000 | 70,000 | 0 | 0 |
| 9. | Construct Roadways for Parcel | | , | | |
| l | Development | 1,040,000 | 0 | 0 | 1,040,000 |
| 10. | Improve Airport Infrastructure | 350,000 | 318,710 | 15,645 | 15,645 |
| 11. | Construct Taxiway Northeast Parcel | | - | | |
| | Development | 653,000 | 594,622 | 29,189 | 29,189 |
| 12. | Construct Taxiway for Southeast Parcel | | · | | |
| | Development | 715,000 | 651,079 | 31,960 | 31,961 |
| | Intermediate Planning Horizon Total | \$4,785,000 | \$3,136,717 | \$401,641 | \$1,246,642 |

Plus or Minus Other Proposed Development:

| Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|------------------|---------------|-----------------|------------------|----------------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| TOTAL | | | | |

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The Town should have applications submitted early for the maximum funding possible in case additional funds become available.

LONG RANGE PLANNING HORIZON Airport Development Program

The table provided below has been designed to note the funds available for development so that they can be kept in mind while analyzing the development factors outlined for this period on the

next few pages. The table also provides a reminder of other potential funding sources that might be used in critical situations.

| Airport Funds Balance | \$ |
|-----------------------|----|
| Bonds | \$ |
| Contributions/ Other | \$ |
| TOTAL | \$ |

As a reminder, airport development should be keyed to demand (actual activity) rather than to a specific time frame (forecast activity). The spaces provided below allow actual activity data to be recorded for comparison with the planning horizon envelope. This

should be the first step in the process of initiating the recommended development program for this period. Significant increases or decreases in actual activity may justify acceleration or deceleration of the airport development schedule.

| Activity | Intermediate Term Planning Horizon Forecast Levels | Actual | Long Range Planning Horizon Forecast Levels |
|----------------|--|--------|---|
| Based Aircraft | 80 | | 130 |
| Operations | 110,000 | | 140,000 |

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs, or development potentials occurred which may impact

the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for each development item includes a 30 percent factor for engineering, contingency, and administration.

LONG RANGE PLANNING HORIZON (Continued) Development Funding

| | Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|----------|--|-------------|-----------------|------------------|----------------|
| 1. | Expand Parking Apron North - Phase II | \$950,000 | \$865,070 | \$42,465 | \$42,465 |
| 2. | Construct Road for North Terminal Area - Phase II | 175,000 | 159,355 | 7,822 | 7,823 |
| 3. | Construct North Terminal Area Parking Lot - Phase II | 117,000 | 0 | 0 | 117,000 |
| 4. | Site Preparation and Paving for | | | Ĭ | · |
| _ ا | Construction of 20 T-hangars | 200,000 | 182,120 | 8,940 | 8,940 |
| 5. 6. | Relocate Yuma Road Extend Runway and Parallel Taxiway | 520,000 | 473,512 | 23,244 | 23,244 |
| | 1,800 Feet North | 1,954,000 | 1,779,312 | 87,344 | 87,344 |
| 7. | Construct Parallel Runway and Taxiway | 4,510,000 | 4,106,806 | 201,597 | 201,597 |
| 8. | Install VGSI-2 on Parallel Runway | 70,000 | 70,000 | 0 | 0 |
| | Long Range Horizon Subtotal | \$8,496,000 | \$7,636,175 | \$371,412 | \$488,413 |

Plus or Minus Other Proposed Development:

| Development Item | Total Cost | FAA Eligible | ADOT Eligible | Local Share |
|------------------|---------------|-----------------|------------------|----------------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| TOTAL | | | | |

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The Town should have applications submitted early for the maximum funding possible in case additional funds become available.



PLANNING HORIZON DEVELOPMENT



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